



## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

**“जानने का अधिकार, जीने का अधिकार”**

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

**“पुराने को छोड़ नये के तरफ”**

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8742 (1978): Adaptor, Main, PTRM [PGD 14: Consumer Products and Allied Equipments]

**“ज्ञान से एक नये भारत का निर्माण”**

Satyanaaranay Gangaram Pitroda

Invent a New India Using Knowledge



**“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”**

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”





BLANK PAGE



PROTECTED BY COPYRIGHT

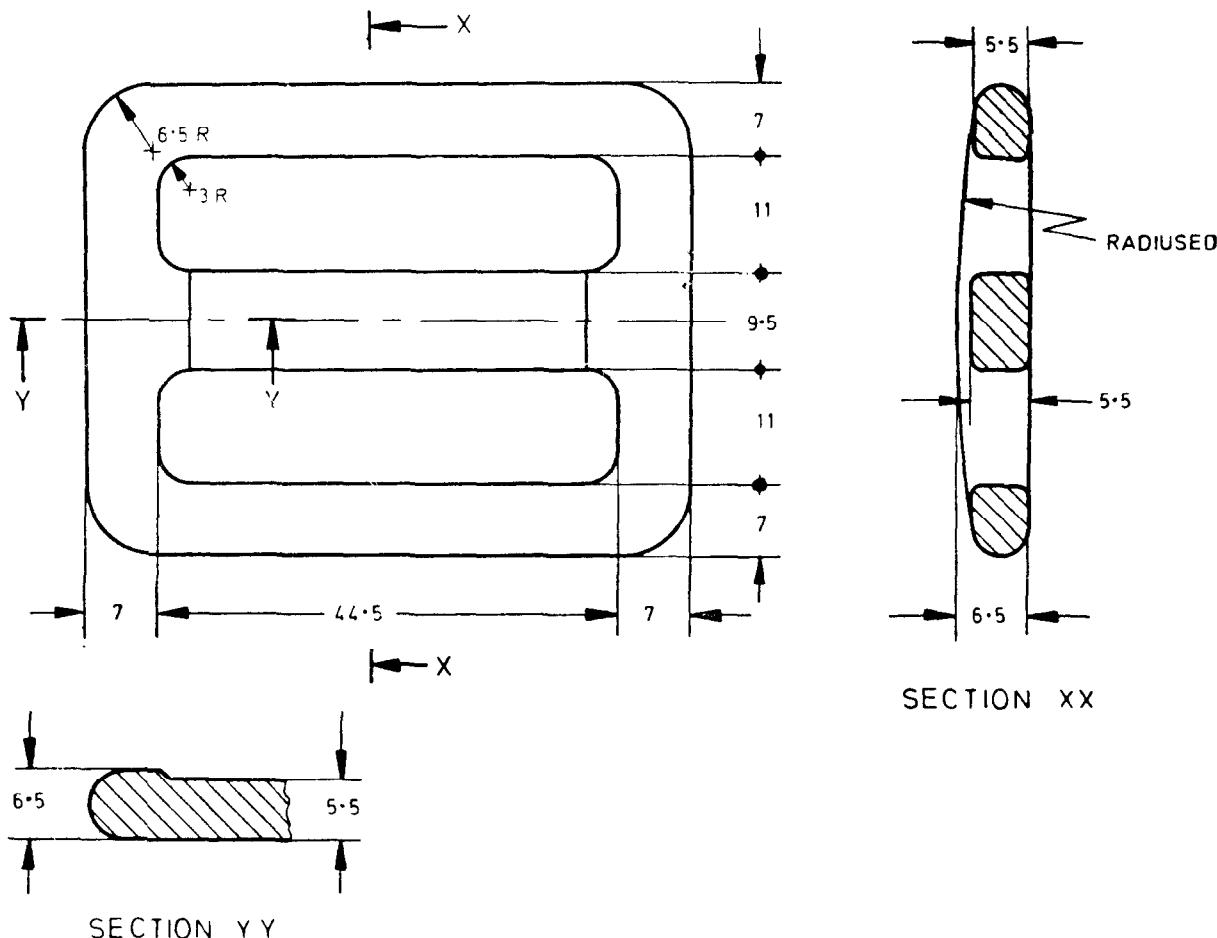


Indian Standard

SPECIFICATION FOR  
ADAPTOR, MAIN, PTRM

**1. Scope** — Dimensional and other requirements for main adaptor PTRM used in harness or pack cover of paratrooper parachute medium assembly.

**2. Shape and Dimensions** — As shown in Fig. 1.



All dimensions in millimetres.  
FIG. 1 ADAPTOR, MAIN, PTRM

**2.1** A deviation of  $\pm 0.5$  mm shall be allowed on all dimensions affecting the cross-sections.

**2.2** A deviation of  $\pm 0.0$  mm shall be allowed on all dimensions given in Fig. 1.

**3. Material** — The material shall be steel of any one of the compositions as given in Table 1.

**3.1** All craft quality steel conforming to Designation 40Ni2Cr1Mo28 of IS : 5517-1969 'Specification for steel for hardening and tempering' may also be used.

**4. Workmanship and Finish**

**4.1** All the corners of the adaptor shall be properly chamfered.

**4.2** All sharp edges and corners shall be rounded off.

**4.3** Adaptor shall be free from cracks, burrs, pits and other surface defects.

**4.4** Adaptor shall be free from bend or distortion.

TABLE 1 CHEMICAL COMPOSITION (PERCENTAGE)

(Clause 3)

Sl No.	Type	Carbon	Manga-nese	Phospho-rous	Sulphur	Silicon	Chromium	Nickel	Molyb-denum
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
i)	Chromium-molybdenum steel	0·38 to 0·43	0·75 to 1·00	0·040 (Max)	0·040 (Max)	0·20 to 0·35	0·80 to 1·10	—	0·15 to 0·25
ii)	Chromium-molybdenum steel	0·28 to 0·33	0·40 to 0·60	0·025 (Max)	0·025 (Max)	0·20 to 0·35	0·80 to 1·10	0·25 (Max)	0·15 to 0·25
iii)	Chromium-nickel-molybdenum steel	0·28 to 0·33	0·70 to 0·90	0·040 (Max)	0·040 (Max)	0·20 to 0·35	0·40 to 0·60	0·40 to 0·70	0·15 to 0·25
iv)	Chromium-nickel-molybdenum steel	0·37 to 0·43	0·70 to 1·05	0·040 (Max)	0·040 (Max)	0·20 to 0·35	0·35 to 0·65	0·35 to 0·75	0·20 to 0·30

**4.5** Adaptors shall be plated chromium and nickel over copper. The minimum thickness over the surface shall be copper 0·008 mm, nickel 0·025 mm and chromium 0·00025 mm. The plating surfaces shall be free from blisters, pits, stain and discolour. The plating shall be uniform throughout and shall be polished bright all over. The plating shall not peel off. The adaptors shall be kept at a temperature of 150 to 175°C for a minimum period of half an hour in order to relieve hydrogen embrittlement.

**4.6** Adaptors shall be rectangular shape.

## 5. Tests

**5.1** Adaptors shall be uniformly hardened and tempered to give a hardness of 370 to 430 HV.

**5.2** Adaptors shall be tested for proof load. The proof load shall not be less than 20·98 kN (2 140 kgf).

**5.3** Adaptors shall be tested for tensile strength. The tensile strength shall be 1 176·80 to 1 314·09 MN/m<sup>2</sup> (120 to 134 kgf/mm<sup>2</sup>).

**5.4** Crack detection test shall be conducted by the use of a suitable magnetic crack detector prior to plating of the adaptors.

**5.5 Adhesion Test** — The plated surface of the adaptors shall be rubbed rapidly and firmly for 15 seconds with a smooth copper disc used edgewise. There shall be no indication of the deposition becoming detached from the base metal.

**5.6 Salt Spray Test** — Adaptors shall be subjected to 20 percent sodium chloride salt solution spray in a chamber. There shall not be any sign of corrosion on completion of the test.

**6. Marking** — Each adaptor shall be marked with the manufacturer's name or initials or registered trade-mark.

**6.1 ISI Certification Marking** — Details available with the Indian Standards Institution.

**7. Packing** — Adaptors shall be packed as agreed to between the purchaser and the supplier.